

Date: Monday February 2, 2004

Speaker:

Mary Barsony, Adjunct Prof. of Physics & Astronomy at San Francisco State University

Title:

Outflow and Disk Evolution in Young Stellar Objects

Abstract:

After presenting a review of the history of the discovery of outflow phenomena from young stellar objects (YSOs) across many wavelength regimes, I will present the most recent results from our ongoing multi-wavelength outflow survey of the nearest star-forming region in the Rho Ophiuchi cloud core (see Phelps & Barsony 2004 January issue of AJ). This well-studied region has ~200 known YSOs and ~50 individual known flows to date (this being a lower limit). The outflow statistics already show that not all Class I protostars are outflow drivers and, contrary to popular belief, many Class II and even perhaps Class III YSOs drive outflows. These results lead directly questions regarding the mechanism(s) by which outflows regulate YSO disk evolution, and, by extension, influence the time available for planetary system formation.